

December 7, 2015

The Honorable Ted Cruz
Committee on Commerce, Science, and
Transportation
404 Russell Senate Office Building
Washington, DC 20510

The Honorable Gary Peters
Committee on Commerce, Science, and
Transportation
724 Hart Senate Office Building
Washington, DC 20510

Dear Senators Cruz and Peters:

As you convene for a hearing to consider our understanding of the magnitude of human impact on Earth's climate, I write on behalf of the American Association for the Advancement of Science (AAAS) to state the scientific consensus view, as echoed in our Board of Directors' 2006 Statement on Climate Change (attached): "climate change is occurring, and rigorous scientific research demonstrates that the greenhouse gases emitted by human activities are the primary driver. These conclusions are based on multiple independent lines of evidence." There is virtually no scientific controversy on the core facts of climate change based on scientific principles we've known from over a hundred years to more recent research.

Scientists from a broad-range of disciplines continue to work each day to strengthen and deepen our understanding of the Earth's climate and humanity's impact thereon. Asking questions and collecting and reexamining evidence is how the scientific process works. We are committed to the principle that scientific inquiry and open scientific communication—regardless of field of study—should proceed unhampered by intrusions on academic freedom.

We share the Congress's goal of enabling objective and meritorious climate science research, and stand ready to provide assistance as you seek to better understand humanity's impact on the Earth's climate.

Sincerely,



Gerald R. Fink
Chair, AAAS Board of Directors
Herman and Margaret Sokol Professor
Whitehead Institute/Massachusetts Institute of Technology

AAAS Board Statement on Climate Change

Approved by the Board of Directors
American Association for the Advancement of Science
9 December 2006

The scientific evidence is clear: global climate change caused by human activities is occurring now, and it is a growing threat to society. Accumulating data from across the globe reveal a wide array of effects: rapidly melting glaciers, destabilization of major ice sheets, increases in extreme weather, rising sea level, shifts in species ranges, and more. The pace of change and the evidence of harm have increased markedly over the last five years. The time to control greenhouse gas emissions is now.

The atmospheric concentration of carbon dioxide, a critical greenhouse gas, is higher than it has been for at least 650,000 years. The average temperature of the Earth is heading for levels not experienced for millions of years. Scientific predictions of the impacts of increasing atmospheric concentrations of greenhouse gases from fossil fuels and deforestation match observed changes. As expected, intensification of droughts, heat waves, floods, wildfires, and severe storms is occur-

ring, with a mounting toll on vulnerable ecosystems and societies. These events are early warning signs of even more devastating damage to come, some of which will be irreversible.

Delaying action to address climate change will increase the environmental and societal consequences as well as the costs. The longer we wait to tackle climate change, the harder and more expensive the task will be.

History provides many examples of society confronting grave threats by mobilizing knowledge and promoting innovation. We need an aggressive research, development and deployment effort to transform the existing and future energy systems of the world away from technologies that emit greenhouse gases. Developing clean energy technologies will provide economic opportunities and ensure future energy supplies.

In addition to rapidly reducing greenhouse gas emissions, it is essential that we develop strategies to adapt to ongoing changes and make communities more resilient to future changes.

The growing torrent of information presents a clear message: we are already experiencing global climate change. It is time to muster the political will for concerted action. Stronger leadership at all levels is needed. The time is now. We must rise to the challenge. We owe this to future generations.

The conclusions in this statement reflect the scientific consensus represented by, for example, the Intergovernmental Panel on Climate Change (www.ipcc.ch/), and the Joint National Academies' statement (<http://nationalacademies.org/onpi/o6072005.pdf>).

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Approved by the AAAS Board of Directors
9 December 2006

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